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EXAMINER	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 29

Application Number: 09/137,842
Filing Date: August 21, 1998
Appellant(s): BAEK ET AL.

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed on March 10, 2003 and the supplemental appeal brief filed on September 22, 2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 7 forms a single group and stands or falls independently. Appealed claims 11, and 13-19 form a single group and stand or fall together.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

Moriconi 5,546,098 6-96

Applicant's Admitted Prior Art (AAPA) (Fig. 1 - Fig. 6; page 1-7)

(10) Grounds of Rejection

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Renumbered claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art, hereinafter AAPA (Fig. 1-6, page 1-7), in view of Godfrey et al. (5,736,973).

In reference to renumbered claims 7-8, the AAPA discloses a notebook computer comprises: a system body 20 having main printed circuit board 20B: a panel module 22 comprising a display module 10, timing control board 16, backlight driver unit 26, backlight 64, drivers 12 and 14, printed circuit film 21 for connecting timing control to the drivers, and printed circuit film 11 to connect main printed circuit board 20B with timing control board. The AAPA discloses everything with the exception that that the timing control circuit and backlight driver is integrated into a printed circuit board (see Fig.1 and 3, page 4, lines 9-31 and page 6, lines 14-33 and Fig. 5). Godfrey discloses an integrated display system in which a backlight driver is

integrated with timing circuit in a printed circuit board in Fig. 3 (see col. 4, line 60 – col. 5, line 16).

It would have been obvious for one of ordinary skill in the art to provide the printed circuit board of Godfrey in the device of the AAPA because it would provide a compact and space efficient circuit for the system.

In addition, absent a showing of critically and/or unexpected result, it would been obvious to one of ordinary skill in the art to integrate the timing control circuit and the backlight driver into a printed circuit board as desired as was judicially recognized In re Murray, 19 C.C.P.A. (Patents) 739, 53 F.2D 541, 11 USPQ 155; In re Zabel et al. , 38 C.C.P.A (Patents) 832, 186 F.2d 735, 88 USPQ 367, which recognizes that the integrating of well known element is normally not desired toward patentable subject matter.

3. Renumbered claims 11 and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art, hereinafter AAPA (Fig. 1-6, page 1-7), in view of Moriconi (U. S. Patent No. 5,546,098).

In reference to claim 11, Figs. 4 –5 of the AAPA show a notebook computer comprises a display module having a display device 22, drivers 12, 14, backlight 24; a body module 20 having main printed circuit board 20, driving circuit 16, a connecting circuit (flexible printed circuit film 21) that connect between drivers 12 and 14 and driving circuit (timing control board 16), a conductive line 19 connect backlight driver to backlight unit 24. The AAPA discloses everything with the exception that driving circuit is located in the system body rather than the

display module as recited. Moriconi discloses that the display circuitry may be located in computer body, and the drivers on display (see Fig. 4).

It would having obvious to utilize the teaching of Moriconi, i.e., providing display circuitry in the main body of the system of the AAPA because this would allow a variety of different types of display module to be used (col. 2, lines 58-63).

In addition absent a showing of critically and/or unexpected result, it would been obvious to one of ordinary skill in the art to relocate the driving control circuit as desired as was judicially recognized with IN RE JAPIKEE USPQ 70 (CCPA 1950), which recognizes that the relocation of well known element is normally not desired toward patentable subject matter.

In reference to renumbered claim 13, the AAPA show the conductive line 19 in Fig. 3.

In reference to renumbered claim 14, Mocoroni does not disclose the driving circuitry includes a timing circuitry and forms a package.

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the timing control circuitry in the display circuitry for providing the timing control for the data driver and scanning driver of the LCD display system.

In addition, it would been obvious to one of ordinary skill in the art to integrate the timing control circuit in the display circuitry board as desired as was judicially recognized In re Murray, 19 C.C.P.A. (Patents) 739, 53 F.2D 541, 11 USPQ 155; In re Zabel et al., 38 C.C.P.A (Patents) 832, 186 F.2d 735, 88 USPQ 367, which recognizes that the integrating of well known element is normally not desired toward patentable subject matter.

In reference to renumbered claims 15-17, the AAPA discloses the display 10 in Fig. 3 and 5 having driving circuit inherently mounted in a circuit board.

In reference to renumbered claims 18-19, Moriconi disclose in Fig. 1 a laptop computer having a keyboard with a matrix display module that can be rotated between an open and closed position.

(11) Response to Argument

Applicant's arguments filed on September 22, 2003, pages 5-10, have been fully considered but they are not persuasive.

With respect to claim 7, Applicant argues, "although the AAPA does show flexible printed circuit film 11 and 17, neither of these films connect a timing control unit to a driver. Further, this disclosure does not show a module control board having timing control unit for driving driver and backlight driver to drive a backlight unit of a panel module. Neither Moriconi and /or Godfrey disclose a first connecting device, including a flexible printed circuit film that connects a timing control unit with the driver (claim 7). However, the AAPA discloses the printed circuit film 21 that connects the timing control 16 and drivers 12 and 14 as shown in Fig. 3, Fig. 6 and page 4, lines 25-32.

In addition, it would been obvious to one of ordinary skill in the art to integrate the timing control circuit and the backlight driver into a printed circuit board as desired as was judicially recognized In re Murray, 19 C.C.P.A. (Patents) 739, 53 F.2D 541, 11 USPQ 155; In re Zabel et al., 38 C.C.P.A (Patents) 832, 186 F.2d 735, 88 USPQ 367, which recognizes that the integrating of well known element is normally not desired toward patentable subject matter.

With respect to claims 11 and 13-19, in response to the argument cited none of the cited art alone or in combination, discloses a flexible printed circuit film that connects the drivers and a driving circuit (claim 11).) and a module control board that drives the drivers in the display module and a backlight . Refer to the above argument for the printed circuit film that connects the drivers and a driving circuit as applied to claim 7. Moreover, Moriconi discloses that the display circuitry may be located in one module, and the scanning drivers and data drivers are located on another module (see Fig. 4). It would having obvious to utilize the teaching of Moriconi, i.e., providing AAPA's and Godfrey display circuitry in the main body of the system because this would allow the a variety of different types of display module to be used (col. 2, lines 58-63).

In addition, absent a showing of critically and/or unexpected result, it would been obvious to one of ordinary skill in the art to relocate the integrated timing control circuit and the backlight driver unit to the main control board in the body portion of the system as desired as was judicially recognized with IN RE JAPIKEE USPQ 70 (CCPA 1950), which recognizes that the relocation of well known element is normally not desired toward patentable subject matter.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

DUC Q DINH
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February 12, 2004

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